Prices and Vulnerability in Armenia

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Potato and its price in Armenia

Potato has its special place among food products used by various nations, including Armenians. Since ancient times, this highly consumed good has maintained its relevance. According to the UN Food and Agriculture Organization data, in 2007[1], each European annually consumed 91 kg potato and each Western Asian consumed 38 kg, on average. The same indicator for the Armenian was nearly 51 kg. Hence, it is not casual that potato has got a significant place in two consumer baskets developed by World Bank (WB) and RA Ministry of Health.

According to the basket developed by the Ministry of Health, the annual consumption norm for potatoes amounts to 91 kg, whereas it makes only 53 kg according to the WB approach[2]. Based on RA NSS calculations, the average Armenian consumed 47 kg potatoes during 2010, which makes about 4 kg[3] monthly.

Locally produced potato fully covers domestic consumption in Armenia (self-sufficiency rate was 100.6 percent in 2010). Therefore, it seems that fluctuations in global food markets cannot have an impact on potato prices in domestic market.

[1] The latest comparable data is for 2007.

[2] See more about minimum consumer baskets of RA Ministry of Health and WB in "Prices and Vulnerability in Armenia", Issue 2, available at http://www.edrc.am/WP/Prices_and_Vulnerability/Prices_and_Vulnerability_july.pdf

[3] Source: RA NSS, "Food security and poverty, January-June 2011", Tables 5.16 and 5.17.

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Table 1. Domestic production of potato during 1998-2010

	1998	1999	2000	01	02	03	04	05	06	07	08	09	10
Land area, thousand ha	33	32	34	32	31	32	36	34	33	32	34	32	28
Crop yield, c/ha	134	131	87	115	123	157	162	165	163	183	189	184	170
Gross harvest, thousand tons	440	414	290	364	374	508	576	564	540	584	649	594	482

Source: RA NSS.

Nevertheless, potato prices rose significantly in 2010 and went on rising during 2011.

The aforementioned developments rose interest towards potatoes, and this publication was mainly developed to reveal the reasons of potato price fluctuations.

Is Armenia secured with potato?

In order to answer this question, we studied data on potato land area, potato crop yield as well as potato foreign turnover in 1998-2010.

During those years, average crop yield of potato was 146 quintal/ha and there were 33 thousand hectares of potato land areas. Hence, volumes of locally produced potato ranged over 474 thousand tons on average with some rises and falls (See Table 1).

The yield of potato in 2010 declined by nearly 8 percent as compared to the previous year. As a result, potato crop yield amounted only 170 quintal/ha. However, during the observed period, the sharpest decline in potato crop yield was recorded in 2000 when it reached its lowest level making only 290 thousand tons. 2008 and 2009 were more favorable for crop yield when it made 189 quintal/ha and 184 quintal/ha respectively. However, enhancement of potato land areas did not accompany such a high level of crop yield; moreover, in 2009, those areas decreased by nearly 7 percent.

Reduction of **land areas** was maintained in 2010: they decreased by 11 percent as compared to 2009, and reached 28.4 thousand hectares, the lowest level since 1998. As a result of such declines in crop yield and land areas, in 2010, **gross harvest** of potato was 482 thousand tons, decreasing by 110 thousand tons from 2009. In terms of abundant harvest, 2008 was a more

Table 2. The self-sufficiency rate of potato and foreign trade during 1998-2010

	1998	1999	2000	01	02	03	04	05	06	07	08	09	10
Turnover (thousand tons)	-	-	-	2.0	1.9	2.9	1.6	1.2	1.7	6.1	7.9	6.8	6.0
Exports (thousand tons)	-	-	-	0.0	0.0	0.0	0.0	0.3	0.0	0.1	3.6	5.9	4.4
Imports (thousand tons)	-	-	-	2.0	1.9	2.9	1.6	0.9	1.7	6.0	4.3	0.9	1.6
Self-sufficiency rate (%)	100	100	100	99.0	99.5	99.4	99.7	99.9	99.7	99.0	99.9	100.8	100.6

Source: RA NSS.

favorable year with about 560 thousand tons of potato harvest.

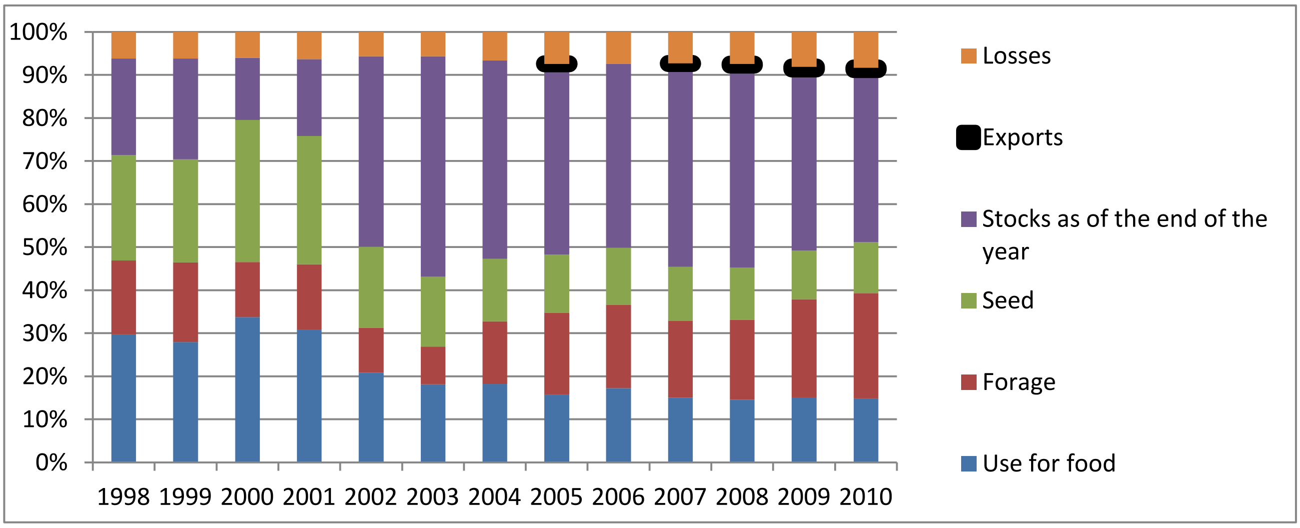
It appears that in 2010, the mentioned level of potato production was completely sufficient to cover domestic demand in Armenia. In particular, it is indicated by the self-sufficiency index of the RA NSS[4] (See Table 2). The lowest level of self-sufficiency of potato, 99 percent, was recorded in 2007, and in 2010, it was already about 101 percent.

With regard to foreign turnover of potato during the observed period, it reached its peak in 2008 with nearly 8 thousand tons of potato. It made only one percent of locally produced potato of the same year. It is worth mentioning that export of potato has been activated a little since 2007, and in 2009, about 6 thousand tons of potatoes were exported. During the observed period, potatoes in small quantities were always imported; the export reached its peak in 2007 (more than 6 thousand tons). It appears that such small portions of potato export and import cannot have a significant impact on the formation of potato price.

It is worth mentioning that in Armenia, total supply of potato is made of not only local production and imports but also potato stocks at beginning of the year. It is also interesting to know how much potato is finally consumed (for food) and what other major directions of potato consumption exist (See Figure 1).

Thus, after studying the structure of potato consumption illustrated in the Figure 1, it becomes obvious that till 2004, potato was used mainly in preparation of food, and since 2005 it started to be used mainly as forage. As a result, in 2010, the share of forage in potato consumption made about 25 percent or 235 thousand tons, whereas

Figure 1.Potato consumption complete structure during 1998-2010



Source: RA NSS.

the share of potato consumption for food purposes was only 15 percent or 143 thousand tons. Besides, in 2010, nearly 12 percent of potato consumption (or 114 thousand tons) was used as seed, and losses made 14 percent equal to 80 thousand tons.

Thus, all the aforementioned arguments reveal that Armenia is completely secured with potato and we mainly consume potatoes of domestic production. In this regard, it is necessary to study all major factors that affect the price of domestically produced potato.

Factors affecting the price of potato and their behavior

To analyze potato price behavior, a number of factors were pointed out which may have a significant impact on the formation of food prices. We give importance to factors like productivity, transportation costs, land tax payments and irrigation fee as well as the prices of fertilizer and potato seed.

Let's study the behavior of the factors mentioned above, and their impact on potato price (See Table 3).

In 2010, average **land tax** payments made AMD 9087, on average, increasing by 16 percent as compared to 2009 when it was AMD 7831 (See Table 3).

It is worth mentioning that the tax payments for agricultural lands do not depend on the outcomes of economic activity of taxpayer's. Instead, it is established as a fixed fee for the unit of the land area and is paid annually. The tax amount is calculated by accounting bodies based on the cadastral assessment of net income that is reassessed every three years. It should be mentioned that during 1998-2010, country average land tax fee for one hectare ranged from AMD 6330 (1999) to AMD 11042 (2006).

In 2010, **irrigation fee** for one cubic meter was AMD 11 exceeding the AMD 9 of 2009 by 22 percent (See Table 3). On the other hand, according to RA

Table 3. Price fluctuations of main factors affecting potato price during 1998-2010 (%, compared to previous year)

	1998	1999	2000	01	02	03	04	05	06	07	08	09	10
Potato price	-6.8	-6.6	-15.7	33.6	7.7	-3.2	-18.8	5.0	55.1	19.3	-34.0	-24.5	55.6
Land tax	5.4	-15.6	11.5	25.0	-5.4	17.7	-18.8	13.3	22.4	-17.2	-9.6	-5.3	16.0
Irrigation fee	-40.7	-17.1	31.0	7.9	-2.4	2.5	56.1	6.3	10.3	2.7	11.7	4.7	22.2
Plowing the soil	-5.1	1.2	9.0	8.8	8.1	-0.3	-1.5	1.9	14.5	19.2	-8.7	8.2	16.7
Transportation costs	60.2	1.7	22.2	-10.8	-0.7	5.1	0.1	26.0	-2.7	28.9	27.3	8.4	-0.2
Fertilizer	-4.3	-19.2	-22.4	63.2	-17.2	19.3	4.4	-0.2	7.8	-1.4	15.4	51.4	-8.5
Seed	-1.3	-0.8	-13.5	13.4	29.6	17.3	-16.1	-14.0	16.3	71.6	-25.7	-36.5	24.4

Source: RA NSS.

State Committee for Water Management, in 2010, supply cost price of one cubic meter water was rather higher than the charged AMD 11, and actually it was about 35 AMD included costs of water supplied both by gravity and by pumps.

Among paid agricultural services, the tariff of **plowing the soil** increased by nearly 17 percent as compared to the previous year. Thereby, in 2010, farm workers paid about AMD 17,800 per hectare of land area for plowing, against the AMD 15,220 in 2009. The inflation was largely contributed by the increase of prices on diesel and petrol fuel by 17.5 and 20.8 percent respectively in the same year.

Transportation costs for 1 ton/km made AMD 362 in 2010 against AMD 363 in 2009. It is worth mentioning that transportation costs rose continually during 2007-2009. Thus, in 2010 transportation costs for one ton product increased by 78 percent or by AMD 160 as compared to 2006.

In 2010, **fertilizer** price for one kg was AMD 144 decreasing by 8.5 percent as compared to the previous year. Fertilizer prices rose sharply in 2008 and in 2009 by 15 and 51 percent, respectively (see Table 3). Thereby, in 2010, for one kilogram of fertilizer farmers paid more by nearly 60 percent (or by AMD 54) as compared to 2007.

Discussions on fertilizers have recently been activated on various platforms included the state platform. In particular, RA Prime Minister affirms that traditional saltpeter fertilizer will be replaced by locally produced new generation fertilizers (organic fertilizers) which are safe for the environment and are the effective in overcoming soil salt corrosion; therewith those fertilizers are cheaper by 30 percent than the imported one. In 2011, the production of organic fertilizers could cover 50 percent of domestic consumption whereas in 2012, it will already cover domestic demand completely.

Nevertheless, the problem related to fertilizers cannot be considered fully resolved. Armenian farm workers can hardly give up their traditional notion of land cultivation, and the use of organic fertilizer implies completely new, revolutionary methods of land cultivation. Thereby, additional stimuli are needed to enable farm workers assessing risks and advantages of new fertilizer application realistically.

Certainly, the opportunity of postponing payments for fertilizer until the harvest is reaped, given by the Government, will contribute to that process.

Besides, **yield volume** and **potato seed price** have a significant impact on potato price formation (see Figure 2 and Table 3).

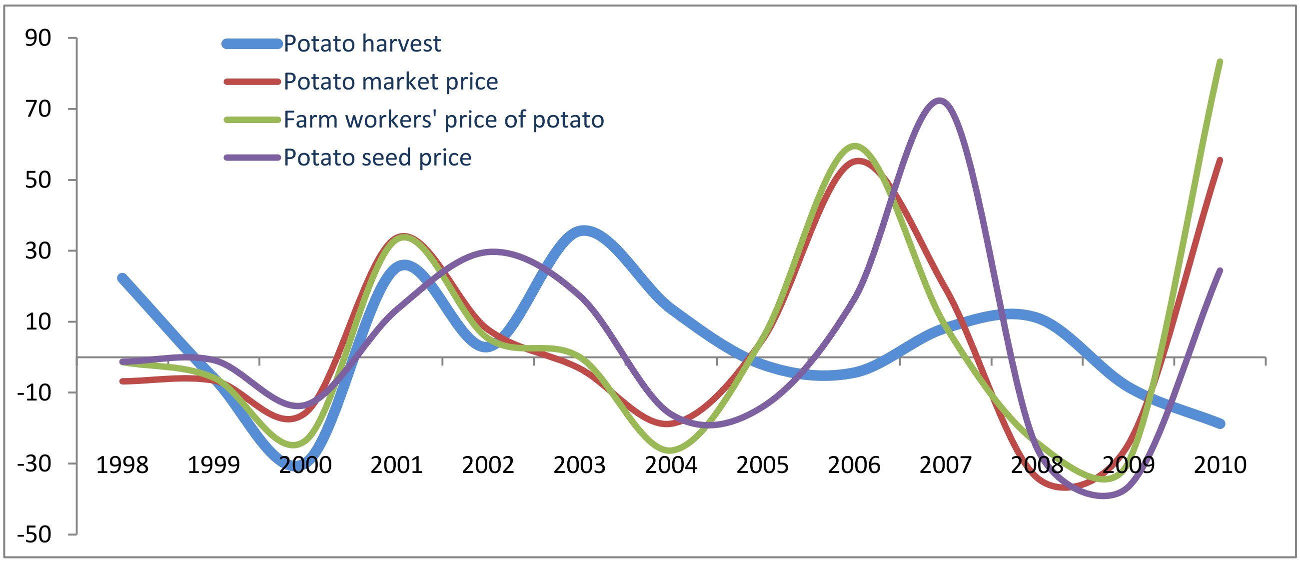
As Figure 2 illustrates, market price of potato increased sharply in 2001, 2006 and 2010. The inflation was mainly reasoned by decreased potato yield, which led to an inflation of both potato seed and potato sold by farm workers. Apart from this, yield scarcity decreases potato stocks, which is considered another factor contributing to potato price rise in the following year.

Indeed, yield reduction in 2005 and in 2006 by 2.1 and 4.4 percent respectively, were accompanied with an inflation of more than by 55 percent in 2006. In following two years (2007 and 2008), a considerable increase in the yield led to price reduction both in 2008 and in 2009.

Referring to price increase in 2010, we should mention that it was also reasoned mainly by potato yield reduction (by 8.5 percent in 2009 and by 19 percent in 2010). As a result, in 2010, consumers paid AMD 182 per kilogram of potato which was more by AMD 65 as compared to the previous year.

On the other hand, yield reduction or, in other words, the decision to grow potato is largely influenced by the **price of potato seed**. The issues of potato seed and its accessibility have recently been subjects of frequent discussions on TV and other media. Farmers get high-quality seeds from the importers, thus exchange rate fluctuations influence seed prices too. Moreover, farmers cannot always be sure that the seeds acquired with high prices are of high quality. That is why farm workers get majority of necessary seed from their harvest thus not performing an update

Figure 2. Potato price changes and factors affecting it, %



Source: RA NSS.

of variety and decreasing reproduction each time.

In 2010, one kilogram of potato seed was sold by AMD 135, meanwhile in 2009, it was sold by AMD 109. And if in 2008 and 2009, seed prices decreased by 25.7 and 36.5 percent respectively, in 2010, they rose by 24.4 percent. Since 1998, the highest price of potato seed was recorded in 2004 when one kilogram was consumed by AMD 230, and the lowest price was AMD 93 in 2000.

Summarizing aforementioned developments, we can assert that there is much work to do in agricultural sector. In particular, in line with crop yield growth, land areas reduction has taken place. It was reasoned by the high rate of self-sufficiency and lack of foreign markets. A serious obstacle for the latter is that in main partner countries of Armenia, local production of potato completely covers domestic consumption (self-sufficiency rate ranged over 100 percent in Russia, Ukraine and in Georgia). Whereas, our farm workers face serious problems while selling potato surplus, hence it is necessary to find non-traditional export markets (for instance, Arabic countries) and to explore an effectiveness of potato export to those new markets. In 2010, Iraq and Iran served as such markets, and potato exports to those countries made USD 286 thousand and USD 5 thousand respectively[5].

On the other, hand potato could be exported in non-traditional forms like potato powder, which is the raw material for chips production. That is, in reality, Armenia has got potato export potential; the sector just needs a coordinated approach.

Major developments in international markets of food, energy, metals and mineral resources in September

According to the WB data, in September 2011, prices of food decreased by 1 percent, prices of metals and mineral resources decreased by 48 percent, and increase in energy prices made 0.4 percent as compared to August.

Comparisons with September 2010 reveal that prices of food, metals and mineral resources, and energy increased by 18.6 percent, 10.9 percent and by 31.6 percent respectively.

Main trends on international markets in September 2011 as compared to August were the following:

Gold prices that continually increased during eighth month rose by 0.8 percent in September. Since January, gold prices

[5] Source: International Trade Centre: http://www.trademap.org/

have risen by nearly USD 415 and one troy ounce of gold cost USD 1771 on average in September. The reasons for gold price increase remain the same: investors prefer gold as a safe way of self-insurance from various macro-financial risks.

Silver prices decreased by 5.4 percent and made USD 38 for one troy ounce. One of the reasons is that investors get rid of silver surplus stocks anticipating a reduction in demand of silver used for industrial purposes.

Rice (Rice Thai 5%) prices increased by 5.8 percent. Prices started to go up due to Thailand's Government guarantee to buy rice from domestic producers at rates exceeding market prices by 65 percent.

Corn prices decreased by 4.8 percent. Supply expansion had a reducing impact on prices, in particular, abundant crop in China and Ukraine as well as more than expected corn stocks in the USA which was confirmed by recently published report of US Department of Agriculture.

Wheat (US HRW) prices decreased by 3.4 percent. On the on hand, price fall was due to low demand and on the other hand, it was reasoned by stock of wheat larger than it had been anticipated in the USA.

Decrease in **Sugar World** prices made 3.9 percent. Expanded supply of Brazil, the leading sugar exporting country in the world, was largely contributed by favorable weather conditions in this country.

Due to supply enhancement, **tea** prices decreased by 4.5 percent, **coffee Robusta** prices and **cacao** prices decreased by 5.4 percent and 6.2 percent respectively in international markets.

Prices of major metals were overwhelmed by demand reduction expectations and by increasing surplus stocks in markets. As a result, in international markets, **copper**, **nickel** and **tin** prices decreased by 7.8 percent, 6.7 percent and 5.5 percent respectively, **zinc** prices decreased by 4.6 percent, **aluminum** and **lead** prices decreased by 3.6 percent each.

Consumer and Industrial Prices in Armenia in September

In September 2011, 0.8 percent inflation was recorded in Armenian consumer markets as compared to August; prices of both consumer products and services provided to people increased. In particular, overall food prices (including alcoholic beverages and tobacco) increased by 1.2 percent, prices of non-food products rose by 0.5 percent and increase in tariffs on services made 0.1 percent (See Table 4).

Unprecedented increase in sugar price, by 20.9 percent, was the main reason of food prices increase. On the other hand, prices of most products making the minimum food basket also increased in September. In particular, prices of vegetable and potato products increased by 7.1 percent, egg prices increased by 3 percent, and prices of meat and dairy products went up by 1 percent and 1.4 percent respectively. Further inflation was restrained due to decrease in prices of bread products and fruits by 0.4 and 2.2 percent respectively.

Non-food inflation was mainly due to price increase of footwear, as well as cloth and textile products by 2.4 percent and by 1.8 percent respectively. In September, prices increase of jewelry products and medicine was 6.4 percent and 0.3 percent respectively, keeping the trend of growth from previous months. Further inflationary developments were restrained by decreased price of fuel; in particular, petrol and diesel fuel prices fell by 2.6 percent and 1.9 percent respectively, and prices of building materials declined by 0.8 percent.

In September, among services provided to population, prices of educational and recreation services increased by 3.9 percent and 3.2 percent respectively as compared to August.

In September 2011, increase in prices of industrial products was 1.2 percent as compared to August (See Table 4). Thereby, in September general level of prices increased by 2.3 percent as compared to December 2010, exceeding the same indicator of September 2010 by 4.9 percent.

Table 4. Main price indicators in Armenia in June-September 2011, %

	June-11		July-11		August-11		September-11	
	Compared to May	Compared to June 2010	Compared to June	Compared to July 2010	Compared to July	Compared to August 2010	Compared to August	Compared to September 2010
Rise of Consumer Prices	**-1.4**	**8.5**	**-3.0**	**6.3**	**-0.6**	**4.8**	**0.8**	**6.2**
Food (including alcoholic beverages and cigarettes).	-2.6	13.6	-5.4	9.6	-1.0	6.9	1.2	9.4
Non-food	0.1	2.9	0.0	3.1	-0.1	3.0	0.5	3.5
Service	0.1	2.8	-0.2	2.3	0.1	2.1	0.1	2.2
Industrial Price	**0.1**	**11.4**	**-6.0**	**6.3**	**0.7**	**7.8**	**1.2**	**4.9**

Source: RA NSS

Food price developments in Armenia in September

In order to make food price developments in September of this year more obvious, we studied price behavior of products, prices of which increased or decreased more than those of others, comparing September 2011 prices with those in August 2011 and September 2010 (See Tables 6, 8 and 9).

For this purpose, we separated food products from consumer basket of RA NSS (excluding alcoholic beverages and cigarettes). In order to make food price comparisons Information on inflation is taken from monthly publications of RA NSS.

The biggest increase in prices among food products was with **Green onion:** its price increased considerably in September as compared to August (by 76 percent during a month) (see Table 6). At the same time price increase of green onion (by 130.7 percent) was the highest one as compared to September 2010 (See Table 8). As a result, an average price of green onions per kilogram was AMD 1800 in September 2011.

In September, **sugar** price recorded an unprecedented increase by 20.9 percent as compared to August (See Table 6). Thereby, consumers paid AMD 477 for one kilogram of sugar on average in September. Sugar prices increased by 46.2 percent as compared to September 2010, and this rise was especially tangible in Martuni, by AMD 158 (See Table 7). In September 2011, the highest price of sugar, AMD 485 per kilogram, was recorded in Kapan, and the most affordable price, AMD 454 per kilogram was in Vanadzor.

Increase in potato price in September (by 8.4 percent) as compared to August had the strongest impact on the minimum consumer basket's value, when it cost AMD 228 per kilogram on average. On the other hand, potato prices decreased by 10.6 percent or by nearly AMD 25 from September 2010, but exceeding price level of December 2010 by 3.5 percent. In September, potato was comparably expensive in Talin, AMD 241, and the lowest price was about AMD 209 recorded in Martuni (See Tables 5,7 and 9).

In September, **eggplant** prices increased by **28.1** percent as compared to August and cost AMD 140 per kilogram on average. In comparison with September 2010, eggplant prices jumped by 40 percent, and the price increase was the most tangible in Yerevan, by AMD 52. In September 2011, the highest price of eggplant, AMD 167, was detected in Martuni, and the lowest price was recorded in Artashat, AMD 108 (See Tables 6 and 8).

In September, in comparison with August, **cucumber** prices rose by 26.7 percent and cost AMD 325 per kilogram on average (see Table 6). Average republic price level remained almost unchanged decreasing only by AMD 4 as compared to September 2010. Meanwhile cucumber prices recorded extreme fluctuations in regions. In particular, cucumber prices went up by AMD 171 in Vagharshapat as compared to September 2010, whereas in Vanadzor they declined by AMD 134.

Price developments of **minced meat** raise serious concerns. In September price of kilogram minced meat per kilogram increased by 0.7 percent as compared to August and made AMD 2450 on average. The price was higher in Kapan, about AMD 3040 and lower in Martuni, nearly AMD 1370 (See Table 8). It appears that the amount of money required to buy a kilogram of minced meat in Kapan is sufficient to buy 2 kilogram minced meat in Martuni.

Comparisons with the previous year raise questions as well. In September 2010, average republic price of minced meat increased by 22.8 percent or by nearly AMD 460 (See Table 8). And in regions, price fluctuations are surprising, in particular, in Kapan, prices of minced meat increased by about AMD 1114 as compared to September 2010, meanwhile in Martuni, prices declined by nearly AMD 30.

In comparison with the previous year, **beech** prices more than doubled (See Table 8); in September 2011 price for one kilogram beech rose by nearly AMD 325 and cost AMD 900 as compared to September 2010. The most rapid price change was recorded in Yeghegnadzor, by AMD 505. In September of this year, beech prices rose by 1.1 percent as compared to August. The highest price on beech, AMD 1045, was recorded in Yerevan, and the lowest one was in Kapan, AMD 600.

Egg prices (for 10 pieces) increased by 3 percent in September as compared to August, and increased by 40 percent as compared to September 2010 (See Table 8). Thereby, in September 2011, consumers paid AMD 583 for 10 eggs: this amount was higher by AMD 165 if compared with that of September 2010; at the same time the highest rise in egg prices was recorded in Artashat, by AMD 190. In September 2011, egg was more expensive in Kapan amounting AMD 615, and the lowest price, AMD 525, was recorded in Vagharshapat.

Table 5. Price trends of a selected group of products from Armenia's food basket in January-September 2011

Product	January	February	March	April	May	June	July	August	September
Price increase as compared to the previous month, %									
Bread (high quality)	0.0	3.0	0.4	-0.1	0.0	-0.2	-0.2	-0.3	-0.2
Bread (first quality)	0.0	2.7	0.4	0.0	0.0	-0.2	-0.2	-0.2	-0.4
Beef	6.0	-1.6	-0.4	-0.8	0.1	5.0	4.2	0.4	0.2
Fresh Milk	2.8	-0.1	0.0	-0.2	-0.1	-0.5	-0.7	0.1	1.1
Yoghourt	2.2	-0.2	0.1	-0.3	0.6	-0.5	-0.4	5.3	1.3
Cheese "Lori"	0.7	0.4	0.7	1.3	1.1	-0.3	-4.9	-0.1	2.1
Cheese "Chanagh"	0.3	0.2	1.1	1.4	1.1	-0.6	-5.3	-0.8	1.6
Homemade cheese (of cow milk)	0.0	0.4	0.2	0.6	0.4	-0.8	-0.3	-0.1	0.7
Potatoes	19.8	16.2	7.2	-2.9	17.1	-12.9	-40.2	8.0	8.4
Price increase as compared to December 2010, %									
Bread (high quality)	0.0	3.0	3.4	3.3	3.3	3.1	2.9	2.6	2.4
Bread (first quality)	0.0	2.7	3.1	3.1	3.1	2.9	2.7	2.5	2.1
Beef	6.0	4.3	3.9	3.1	3.2	8.3	12.9	13.3	13.5
Fresh Milk	2.8	2.7	2.7	2.5	2.4	1.9	1.2	1.3	2.4
Yoghourt	2.2	2.0	2.1	1.8	2.4	1.9	1.5	6.9	8.3
Cheese "Lori"	0.7	1.1	1.8	3.1	4.3	4.0	-1.1	-1.2	0.8
Cheese "Chanagh"	0.3	0.5	1.6	3.0	4.2	3.5	-2.0	-2.7	-1.2
Homemade cheese (of cow milk)	0.0	0.4	0.6	1.2	1.6	0.8	0.5	0.4	1.1
Potatoes	19.8	39.2	49.2	44.9	69.7	47.8	-11.6	-4.5	3.5

Source: RA NSS, EDRC Calculations

Table 6. Top 10 products with biggest price increase in April-September 2011 in Armenia

(Price changes are comparisons with the previous month, %)

	April		May		June		July		August		September	
№	Product	Inflation, %	Product	Inflation, %	Product	Inflation, %	Product	Inflation, %	Product	Inflation, %	Product	Inflation, %
1	Cabbage	20.2	Green beans	82.7	Melon	129.3	Strawberry	41.5	Apricot	65.6	Green Onions	76.0
2	Persimmon	12.2	Table beet	36.6	Carrot	11.3	Cauliflower	25.4	Coffee PELE	16.9	Radish	43.2
3	Table beet	12	Potato	17.1	Sugar beet	8.3	Pork	14	Green beans	11.9	Pomegranate	38.3
4	Other oils (ghee)	8.8	Mandarin	11.8	Peas	7.3	Coffee PELE	5.9	Pork	11.7	Persimmon	33.9
5	Cheese “Cheddar”	7.5	Cabbage	10.9	Coffee	5.8	Food Soda	4.8	Potato	8.0	Eggplant	28.1
6	Butter	7.3	Grape	10.4	Beef	5.0	Beef	4.2	Orange	7.8	Cucumber	26.7
7	Mandarin	6.2	Carrot	8.1	Peach	4.9	Mutton	4.1	Sour Cream	7.3	Sugar	20.9
8	Orange	5	Garlic	7.7	Grained coffee	4.7	Beef fillet	3.9	Chocolate Snickers	5.5	Cabbage	15.5
9	Green pepper	4.6	Beech	6.6	Persimmon	4.7	Beef liver, heart	3.3	Yogurt	5.3	Watermelon	12.8
10	Sugar	4.2	Orange	4.4	Grape	4.6	Coffee NESCAFE	3.2	Mutton	4.0	Lemon	11.3

Source: RA NSS.

Table 7. Product prices and price changes of a selected group of products in September 2011 compared to September 2010, by regions of Armenia, (AMD per kg)

	Yerevan		Gyumri		Vanadzor		Vagharshapat		Talin		Dilijan	
	price	dif.	price	dif.	price	dif.	price	dif.	price	dif.	price	dif.
	AMD		AMD		AMD		AMD		AMD		AMD	
Cheese "Lori"	2,323	630	2,147	519	2,370	813	2,149	520	2,666	950	2,700	800
Butter	3,839	872	2,933	480	2,650	516	2,770	350	3,022	422	2,803	487
Apple	562	82	491	-281	402	-79	409	42	542	173	388	-162
Buckwheat	1,125	401	975	157	943	169	924	132	1,056	338	1,038	193
Beef	2,606	428	2,637	455	2,500	441	2,500	300	2,650	650	2,500	400
Minced meet	2,513	454	2,813	958	2,554	587	1,477	-3	2,299	299	2,617	417
Potato	230	-33	216	-26	222	-13	213	-42	241	13	236	20
Grain (wheat)	194	24	227	53	169	7	200	50	192	22	250	50
Bread (lavash)	666	15	620	1	788	-11	499	126	440	70	644	0
Bread (high quality)	460	23	379	15	346	7	370	14	424	3	343	2
Sugar	481	154	463	137	454	129	463	142	474	138	482	148
Fresh Milk	355	0	316	40	282	10	297	27	298	60	332	43

	Hrazdan, Charencavan		Yeghegnadzor		Martuni		Kapan		Artashat	
	price	dif.	price	dif.	price	dif.	price	dif.	price	dif.
	AMD		AMD		AMD		AMD		AMD	
Cheese "Lori"	2,444	726	2,566	766	2,184	464	2,483	552	2,642	892
Butter	2,628	426	2,596	396	2,594	394	2,708	366	2,701	551
Apple	330	-124	342	45	412	-71	436	18	465	8
Buckwheat	981	268	1,013	246	988	271	1,099	347	1,000	222
Beef	2,439	339	2,700	601	2,500	500	2,452	452	2,500	300
Minced meet	2,439	339	2,859	559	1,369	-31	3,039	1,114	2,700	500
Potato	234	-2	222	-35	209	-16	232	-41	233	-11
Grain (wheat)	167	-15	203	33	188	21	177	14	180	15
Bread (lavash)	468	-2	557	6	533	23	572	2	480	0
Bread (high quality)	362	3	432	42	374	-21	390	40	367	2
Sugar	472	137	476	156	480	158	485	150	480	152
Fresh Milk	299	19	338	48	351	81	387	74	375	12

Source: RA NSS, EDRC's Calculations

Table 8. Top 30 products of which the prices increased the most in the period of September 2010-September 2011 in Armenia

(In comparison to September 2010, %)

№	Product	Measurement Unit	Inflation, %
1	Green Onions	kg	130.7
2	Beech	kg	57.0
3	Sugar	kg	46.4
4	Buckwheat	kg	45.1
5	Eggplant	kg	40.0
6	Egg	10 psc	39.9
7	Other meat (khash)	kg	39.0
8	Cheese “Lori”	kg	38.7
9	Dried Fruits	kg	38.3
10	Homemade cheese (of cow milk)	kg	37.7
11	Cheese “Chanagh”	kg	35.5
12	Pork	kg	34.0
13	Milk powder	kg	30.0
14	Grape	kg	28.9
15	Coffee PELE	box (100 grams)	28.2
16	Pomegranate	kg	27.8
17	Green pepper	kg	26.8
18	Condensed milk	box (400 grams)	26.4
19	Butter	kg	25.9
20	Vegetable oil (sunflower)	l	23.5
21	Minced meat	kg	22.8
22	Beef fillet	kg	22.2
23	Other oil (ghee)	box (2160 grams)	22.0
24	Walnut kernel	kg	21.0
25	Beef	kg	19.7
26	Peas	kg	19.1
27	Mutton	kg	19.1
28	Pastirma	kg	18.7
29	Cheese “Cheddar”	kg	17.5
30	Black coffee minced	box (100 grams)	17.5

Source: RA NSS.

Table 9. Top 30 products of which the prices decreased the most in the period of September 2010- September 2011 in Armenia

(In comparison to September 2010, %)

№	Product	Measurement Unit	Inflation, %
1	Cabbage	kg	-61.2
2	Peach	kg	-43.2
3	Mandarin	kg	-37.4
4	Apricot	kg	-31.4
5	Plum	kg	-27.0
6	Carrot	kg	-18.8
7	Tomato	kg	-15.9
8	Table beet	kg	-13.2
9	Potato	kg	-10.6
10	Radish	kg	-9.9
11	Pear	kg	-9.1
12	Melon	kg	-8.6
13	Watermelon	kg	-7.8
14	Persimmon	kg	-7.5
15	Mushrooms	kg	-6.7
16	Tropical fruit (orange)	kg	-4.7
17	Mayonnaise	kg	-4.2
18	Cauliflower	kg	-4.2
19	Flour first class	kg	-1.9
20	Limon	psc	-1.8
21	Fresh fish “Trout”	kg	-1.4
22	Dry Soup	2 psc	-1.4
23	Black Pepper	box	-1.0
24	Ketchup	0.5l	-0.9
25	Olives (black, canned)	box (225 grams)	-0.5
26	Black leaf tea	box (100 grams)	-0.4
27	Vinegar	0.5l	-0.4
28	Beef can	kg	-0.3
29	Yoghurt	box (150 grams)	-0.3
30	Water filtered	1.5l	-0.3

Source: RA NSS.